```
int waiting = 0; //等待理发的顾客坐的椅子数
int chairs = n; //为顾客准备的椅子数
semaphore customers, barbers, mutex;
customers = 0; barbers = 0; mutex = 1;
```

```
process barber(){
    while(true){
        P(customers); //判断有无顾客，若无顾客，则理发师睡眠
        P(mutex); //若有顾客，则进入临界区
        waiting--;
        V(barbers); //理发师准备为顾客理发
        V(mutex); //退出临界区
            为顾客理发;
    }
}
```

```
process customer_i(){
    P(mutex); //进入临界区
    if(waiting < chairs){ //有无空椅子
        waiting++;
        V(customers); //唤醒理发师
        V(mutex); //退出临界区
        P(barbers); //理发师忙，顾客坐下等待
            理发;
    }else{
        V(mutex); //等待人满，顾客离开
    }
}
```